



### Product Description

John Crane 5-ring valve packing sets are available in standard or utility arrangements.

**Standard valve packing:** A unique valve packing set consisting of a presized squared rings, which will seal the majority of liquids encountered in a refinery or petrochemical plant.

**Utility valve packing:** John Crane utility valve packing sets incorporate ultrahigh purity Crane-foil™ (flexible graphite) and ultrahigh purity graphite yarns to ensure low contaminant levels.

### Performance Capabilities

- Temperature: 650°C/1200°F (non-oxidizing atmosphere)  
455°C/850°F (oxidizing atmosphere)
- Pressure: 415 bar g/6000 psig
- pH range: 0 to 14 (except strong oxidizers)

### Features/Benefits:

**Standard Valve Packing:**

- Two high density John Crane G58 graphite die-formed rings form the top and bottom sealing rings. These rings ensure compression of the middle sealing rings and will prevent any packing extrusion. For pressures above 138 bar/2000 psi, G58I is recommended for the top and bottom rings.
- Three medium density Crane-foil die-formed rings comprise the center sealing rings which are completely contained between the end rings.

**Utility Valve Packing:**

- Two ultrahigh purity N-1635G braided graphite yarn rings form the top and bottom sealing rings. These rings ensure compression of the middle sealing rings and prevent extrusion. The material complies with GE spec. NEDC-31735P.

- Three N-267 ultrahigh purity Crane-foil middle rings comprise the center sealing rings which are completely contained between the end rings. The material complies with GE spec. NEDC-31735P.

Both packing designs can be either statically loaded or live-loaded. John Crane provides specifications for liveloading that include spring configuration and gland bolt torque requirements calculated for individual valve services.

These packing sets provide maximum performance whether installed in a new valve or when repacking an installed valve.

- Low emission performance
- Fire Safe - Tested per specifications meeting or exceeding API 607 requirements (standard set)
- Available in Cartridge-Pak for valve original equipment manufacturers (OEM)

### Standard Valve Packing

#### End Rings

John Crane's Style G58 rings are manufactured by using a high purity flexible graphite yarn that is first braided and then die-formed into high density end rings. The Crane-foil flexible graphite yarn is reinforced with a high strength, high temperature filament to provide maximum strength for the end ring material. The high density rings ensure proper compression of the middle sealing rings while preventing any extrusion of the softer sealing rings.

#### Middle Rings

The middle rings are manufactured from John Crane's Style 267 Crane-foil flexible graphite tape which contains a passive inhibitor. The flexible graphite contains no binders and is chemically inert.

### Material Specifications

Middle Rings (3)	Style 267 Crane-foil die-formed ring Temperature: 535°C/1000°F pH: 0-14
Braided End Rings (2)	Style G58 (No PTFE) Temperature: 535°C/1000°F pH: 0-14
Spacer	Carbon Graphite
Springs (Live-load)	17-7 PH Stainless Steel

### Utility Valve Packing

#### End Rings

John Crane's Style N-1635G rings are manufactured by using a high purity graphite continuous filament yarn which is interlace braided. The end rings ensure proper compression of the middle sealing rings, while preventing any extrusion of the softer Style N-267 sealing rings. Style N-1635G is designed for critical valve services and meets the stringent specifications of the power industry as well as MIL-Spec requirements.

#### Middle Rings

The middle rings are manufactured from John Crane's Style N-267 Crane-foil flexible graphite tape which contains a passive inhibitor and has a minimum carbon content of 99.5 percent. The flexible graphite contains no binders or lubricants and is chemically inert.

### Steam Material Specifications

Middle Rings (3)	Style N267 Crane-foil die-formed ring Temperature: 535°C/1000°F pH: 0-14 Braided
Braided End Rings (2)	Style N1635G (No PTFE) Temperature: 535°C/1000°F pH: 0-14
Spacer	Carbon Graphite
Springs (Live-load)	17-7 PH Stainless Steel



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